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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/129,603	08/05/98	ISHIWATA	T 766-25

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HM12/0816

EXAMINER

STROUP, C

ART UNIT	PAPER NUMBER
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1633

16

DATE MAILED: 08/16/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/129,603

Applicant(s)
Tetsuyoshi Ishiwata et al

Examiner
Stroup, Carrie

Group Art Unit
1633



☒ Responsive to communication(s) filed on May 3, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 2-11 and 22-29 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 2-11 and 22-29 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Applicant's amendment Paper 14, filed 5/3/00, has been filed. Claims 1, 12-21 have been cancelled, claims 2, 7, 8-10, and 11 have been amended, and claims 22-29 have been added. Claims 2-11 and 22-29 are currently pending.

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-11 and 22-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 2-11 and 22-29 are unclear as to the metes and bounds of "protein the amino acid sequence represented by SEQ ID NO: 2" (claim 2, lines 2-3) due to improper sentence structure. Amendment of the claim to read "protein having by the amino acid sequence of SEQ ID NO: 2" is recommended, wherein the use of "having" reads on open language and is equivalent to "comprising".

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Claim 7 is unclear as to the metes and bounds of "represented". Does this mean that the sequence of SEQ ID NO: 1 may be altered in any manner, such as substitutions, deletions, or mutations? It is recommended that the claim be amended to read "having or comprising". Applicant is referred to MPEP 2111.03.

Claims 23, 24, 26, and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 23 and 24 comprise a 40 mer portion of a 15 mer nucleotide sequence from which it depends.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hillier et al (3/1995).

Applicant's claimed invention is to an oligonucleotide comprising a 15 mer portion of the nucleotide sequence of the DNA encoding the protein the amino acid sequence represented by SEQ ID NO: 2, comprising the nucleotide sequence of SEQ ID NO: 1, or that which hybridizes to it under stringent conditions.

Hillier et al disclose an EST sequence which is a 24 mer oligonucleotide sequence which binds to base pair 1079-1102 of SEQ ID NO: 1, which encodes the amino acid sequence of SEQ ID NO: 2 (Accession No. T67179, see

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also SEQ ID NO: 7, D87078). In as much as the claim language reads on open flanking regions through use of "comprising", then the claimed invention was clearly anticipated.

5. Claims 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hillier et al (2/1995).

Applicant's claimed invention is to a oligonucleotide sequence comprising a 15 mer portion of a nucleotide sequence complementary to the DNA encoding the protein the amino acid sequence represented by SEQ ID NO: 2, comprising the nucleotide sequence of SEQ ID NO: 1, or that which hybridizes to it under stringent conditions to any 3' or 5' end side nucleotide sequence.

Hillier et al disclose a 26 mer DNA probe which binds to the nucleotide sequence of SEQ ID NO: 1, and whose complementary sequence binds to the 3' end of cDNA clone of glyceraldehyde 3-phosphate dehydrogenase (Accession No. T55131), and a 22 mer DNA probe which binds to the nucleotide sequence of SEQ ID NO: 1, and whose complementary sequence binds to the 5' end of said clone (Accession No. T46955). In as much as the claimed language reads on open flanking regions through the use of "comprising", then the claimed invention was clearly anticipated.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 10, 11, 22, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hillier et al as applied to claims 8 and 9 above, and further in view of Alberts et al (1994).

Applicant's claimed invention is to a method of detecting mRNA corresponding to a nucleotide sequence represented by SEQ ID NO: 1 comprising selecting a 15 mer portion of SEQ ID NO: 1, or a sequence complementary to such, and utilizing said sequences in a Northern blot; and to a composition comprising said sequences in a buffer.

Alberts et al teach that the use of Northern blotting wherein mRNA is analyzed using a labeled DNA probe contained within a solution which hybridizes to the complementary mRNA. (Pg 302).

Therefore, in light of Hillier et al and Alberts et al it would have been obvious to one of ordinary skill in the art to use the DNA sequence probe in a solution, or buffer, as disclosed by Hillier et al in a Northern blot to isolate mRNA via the binding to said probe. One would have been motivated to do this because it is routine in the art to utilize DNA probes for such purposes, especially those encoding an EST sequence to isolate a specified mRNA.

No claim is currently allowed, although claims 2-7 are free of the prior art of record because the art is free of SEQ ID NO: 2, full length.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carrie Stroup whose telephone number is (703) 306-5439. The examiner can normally be reached on Monday through Friday from 8:30 AM to 6:00 PM.

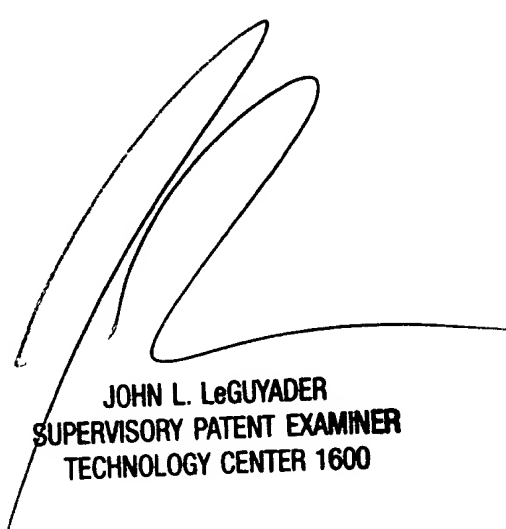
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John LeGuyader, can be reached at (703) 308-0447. The fax phone number for this Group is (703) 308-8724.

Carrie Stroup



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